

IEEE 802 EC 5G/IMT-2020 standing committee

Glenn Parsons - Ericsson

Mentor DCN: EC-16-0088-00-5GSG 6/7/2016

<u>glenn.parsons@ericsson.com</u> +1 613 963 8141

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Scope of the 5G standing committee

Approved Scope

- To provide a report on the following items to the EC:
 - Costs and benefits of creating an IEEE 5G specification
 - Costs and benefits of providing a proposal for IMT-2020, considering possible models of a proposal:
 - as a single technology,
 - as a set of technologies,
 - or as one or more technologies within a proposal from external bodies (e.g., 3GPP)
- During its lifetime, to act as the communication point with other IEEE organizations on this topic.

Organization

- The committee is chartered for 6 months (i.e., due July 2016 at the 802 plenary) as an EC SC (type 2).
 - <u>LMSC P&P</u> section 5.6, item #2
 - The subgroup is responsible for assisting the Sponsor (e.g., drafting all or a portion of a document, drafting responses to comments, drafting public statements on standards, or other purely advisory functions).
- Any 802 WG voting member may participate as a voting member of the committee.

Meeting & Conference Call Schedule

Reflector

- For meeting announcements and discussion
 - stds-802-5g@listserv.ieee.org
- To subscribe
 - Use web interface (preferred):
 - <u>https://listserv.ieee.org/cgi-bin/wa?A0=stds-802-5g</u>
 - Login with your IEEE account email/password
 - Send email to:
 - <u>listserv@ieee.org</u> with content:
 - SUBSCRIBE STDS-802-5G yourname
 - All subscriptions require manual approval by the chair
- Archive
 - There is an archive available on listserv and on the web:
 - <u>http://ieee802.org/Stand_Com/5G/index.html</u>

Meetings

- Face-to-Face Meetings
 - March 14 & 15 IEEE 802 plenary, Macau, CN
 - May 20 IEEE 802 wireless interim, Waikoloa, HI
 - May 25 IEEE 802.1 interim, Budapest, HU
 - June 24 Ottawa, CA
 - July 25 & 26 IEEE 802 plenary, San Diego, US
- Conference calls
 - Scheduled weekly
 - Will be cancelled 24 hours prior if no agenda items

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Meeting Summary

Conference Calls & Meeting Dates

- March 30 10am ET
- April 6 6pm ET
- April 13 10am ET
- April 20 6pm ET
- April 27 10am ET
- May 4 6pm ET
- May 11 10am ET
- May 20 1-4pm HAST
- May 25 9-12 CEST

- June 1 10am ET
- June 8 6pm ET
- June 15 10am ET
- June 24 9-12 ET
- June 29 6pm ET
- July 6 10am ET
- July 13 6pm ET
- July 20 10am ET
- July 25 & 26

Summary

Vibrant discussion

- level set on ITU IMT-2020, IEEE 5G and 3GPP 5G
- assessment of 802 projects related to 5G
- Engagement on derivative options
- ~130 attendees in March plenary
 - ~ 30 in conference calls and May meeting
- Consensus on
 - Report framework, derivative options
 - Initial SWOT and cost/benefit on leading options
- Informal 802.11 view
 - 802 should not generate a standard for IEEE 5G which is independent of Cellular/IMT-2020/3GPP.
 - If IMT-2020, then support for external proposal

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Plan for the report

Proposed Table of Contents

- Introduction
 - IEEE 802 5G related projects
- Options Considered
 - 1. IEEE 5G
 - Description
 - Benefits
 - Costs
 - 2. IMT-2020 single technology
 - Description
 - Benefits
 - Costs
 - 3. IMT-2020 set of technologies
 - Description
 - Benefits
 - Costs
 - 4. IMT-2020 external proposal
 - Description
 - Benefits
 - Costs
- Conclusion

- 802.1
 - P802.1CF OmniRAN architecture
 - P802.1CM TSN for Fronthaul
- 802.3
- 802.11
 - P802.11ax high aggregate throughput. High density of users.
 - IEEE Std 802.11ad high individual throughput, short range.
 - P802.11ay next generation of 802.11ad.
 - P802.11ah <1 GHz for IoT requirements
- 802.15
 - P802.15.3d
 - 100Gb/s THz project
 - P802.15.7 REVa, Optical Wireless Communications,
 - P802.15.4 family.
- 802.16
 - · 802.16.1
- 802.21
 - P802.21.1

Report format?

- Following Table of Contents
- Slide deck
 - Allowing for figures, tables, conclusions
 - Follow a template for SWOT summary
 - Will continue to progress content on calls
 - Easy presentation to EC
 - Chair could be editor
- Document
 - Allowing for more detailed wording
 - Contributions and offline editing required
 - Will need an overview presentation for EC
 - Would require editor

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1.a.i - option name

Objective	Strength	Weakness	Opportunity	Threat
	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.
Description	4.	4.	4.	4.
	Cost		Benefit	

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Next steps

Challenges

- There is reduced interest in 5G in 802
 - IMT-2020
 - No value in an independent submission
 - IEEE 5G
 - Uncertain value in describing
- Interest is still more about sufficient spectrum
 - Support, defense, acquisition, ...
- View that 802 technology will be used in 5G
 - It is inevitable, so there is nothing extra that we need to do

Towards July plenary

- 1. Conclude report
 - In some format
 - May not have all options fleshed out
- 2. Presentation at July plenary
 - Goal for consensus on conclusion
 - Straw polls otherwise
- **3**. Disposition of Standing Committee
 - Modify scope to focus on conclusion
 - Declare success and disband the SC